

**In the Specification**

Please amend the paragraph beginning at page 12, line 5 to read as follows.

Figs. 6a-6f illustrate ~~Fig. 6 illustrates~~ signal waveforms of a number of the signals shown in Fig. 4;

Please amend the paragraph beginning at page 12, line 6 to read as follows.

Figs. 7a-7f illustrate ~~illustrates~~ a method of configuring a mass flow sensor for operation with a process fluid and/or process operating conditions according to an embodiment of the present invention.

Please amend the paragraph beginning at page 36, line 1 to read as follows.

Figs. 6a-6f are illustrations ~~Fig. 6 is an illustration~~ of a number of the signals described above with respect to Fig 4 in which the horizontal or X-axis represents time and the vertical or Y-axis represents the identified signal level. As shown in Fig. 6a 6A, at a time  $T_0$ , a step change (to the level  $F_0$ ) in the set point in signal SI2 is provided. At this time, the error signal E rises to the level  $F_0$ , as the error signal E is equal to the difference between the conditioned flow signal FS2 (which is still at its prior state), and the value of the set point in signal SI2, which is now at a value of  $F_0$ . The error signal times the gain term G (i.e., signal EG) thus steps to a high value and then decreases with time in the manner shown in Fig. 6b 6B. As the output of the proportional gain term 440 is the signal EG multiplied by the constant  $K_P$  (which is less than unity), the signal  $EGK_P$  has a similar shape, although slightly reduced in amplitude, as shown in Fig. 6c 6C. As shown in Fig. 6d 6D, at the time  $T_0$ , the integrated output signal  $EGK_I$  is zero, but quickly starts ramping upward due to the magnitude of the error signal E. The output of the summing circuit 470, representing the sum of the output signal  $EGK_P$  and the integrated output signal  $EGK_I$  is labeled DS and is shown in Fig. 6e 6E. Based upon the drive signal DS provided to the valve drive and valve drive electronics circuit 160, the control valve 170 is opened an

increased amount and the indicated flow signal (e.g., flow signal FS2) starts increasing to the new level of the set point in SI2. As time progresses, the error signal E decreases, the output signal  $EGK_p$  of the proportional gain term 440 decreases, as does the integrated output signal  $EGK_i$ , and the rate of flow is established at the level of the new set point.